

United States Department of Agriculture Forest Service



Technology & Development Program

August 2009	
5100	0951-2330-MTDC

Using the New Spout for Two-Compartment Fuel/Oil Containers

Wes Throop, Project Leader

regulations that took effect on January 1, 2009, limit hydrocarbon emissions from gas cans. These regulations do not apply to metal safety cans or to containers that hold less than 1 quart. The regulations do apply to nearly all plastic gas cans, including the two-compartment containers (commonly referred to as Dolmars) sawyers use to carry chain saw gas and bar oil.

Manufacturers have been meeting the regulations primarily by adding "spillproof" spouts. These spouts are designed so they cannot open accidentally and will lock automatically when they're not being used. Spillproof spouts are typically cumbersome and won't fill fuel containers as quickly as traditional spouts.

In addition to the EPA regulations, the Children's Gasoline Burn Prevention Act requires fuel containers sold in the United States to have childproof closures. This act applies to all fuel containers, including two-compartment chain saw fuel containers and aluminum fuel bottles (also known as Sigg bottles).

Replacement parts are no longer being produced for fuel containers manufactured before January 1, 2009. The only replacement spouts for existing fuel containers will be the new spillproof spouts.

The manufacturer of the two-compartment fuel/oil container stocked by the National Interagency Support Caches has developed a new version that conforms to the new regulations. According to the company, this container should be available during 2009. The container will be marketed under the Briggs and Stratton and possibly the Wedco trade names. The manufacturer's part number is 85310.

Some saw shops have a few of the older style containers in stock. Once these are gone, only containers that comply with the new regulations will be available. Existing two-compartment fuel/oil containers may be used until they are no longer serviceable.

Spillproof spouts and childproof caps are required for new plastic two-compartment fuel/oil containers. This tech tip includes instructions for using the new spillproof spout. Existing plastic two-compartment fuel/oil containers can continue to be used as long as they are serviceable.

Operating Instructions for the New Spillproof Spout

The new spillproof spout comes in a package with a childproof cap (figure 1). Both the spout and the cap have a serrated latch that must be squeezed before the spout or cap can be unscrewed. The latch makes the spout and cap childproof.

The cap should be installed on the fuel container when it is being transported (figure 2).

Remove the cap from the container when you wish to install the spout (figure 3).

Unlock the spout by squeezing the spout's clip between your thumb and forefinger. The spout's clip will click when the spout is unlocked. The spout must be unlocked (figure 4) before any fuel can be dispensed.



Figure 1—The new spout and cap for two-compartment fuel containers.



Figure 2—The cap is installed when the fuel container is being transported.



Figure 3—Installing the spout.

Place the spout's hook over the lip of the fuel container or tank you are dispensing fuel into (figure 5). Make sure the container won't tip over when you apply pressure to the spout.

Push the spout down until the clip releases with an audible click and fuel begins to flow (figure 6). Do not release the pressure on the spout until you finish fueling.

When the fuel container or tank is full, slowly lift the spout. Fuel will automatically stop pouring and the spout will lock automatically.

Before transporting the container, remove the spout and replace it with the cap.

For additional information, contact Wes Throop at MTDC (406–329–3957).



Figure 6—When you apply enough pressure to close the gap between the spout and the spout's clip, fuel can flow.

About the Author

Wes Throop is the program leader for wildland fire chemical systems at MTDC. He received his bachelor's degree in mechanical engineering from the University of Idaho in 1983. Throop has worked as a smokechaser, hotshot firefighter, and engine foreman for the Forest Service, and as a civilian mechanical engineer for the U.S. Department of the Navy. Before coming to MTDC in 1999, he worked as a mechanical engineer at the test reactor area of the Idaho National Engineering and Environmental Laboratory near Idaho Falls, ID.

Library Card

Throop, Wes. 2009. Using the new spout for two-compartment fuel/oil containers. Tech Tip 0951–2330–MTDC. Missoula, MT: U.S. Department of Agriculture, Forest Service, Missoula Technology and Development Center. 4 p.

New U.S. Environmental Protection Agency regulations limit hydrocarbon emissions from fuel containers. For Forest Service employees, the biggest effect of these regulations is on the two-compartment plastic fuel/oil containers that chain saw operators use to carry gasoline and chain saw bar oil. This tech tip includes instructions, along with photos, showing how to use a new spillproof spout. Existing two-compartment plastic fuel/oil containers can continue to be used as long as they are serviceable, but manufacturers can no longer manufacture the old spouts.

Keywords: bar oil, childproof, Dolmars, EPA, gasoline, how to, spillproof



For additional information about fuel containers, contact Wes Throop at MTDC:

USDA Forest Service
Missoula Technology and Development Center

5785 Hwy. 10 West

Fax: 406-329-3719

Missoula, MT 59808-9361 Phone: 406–329–3957

E-mail: wthroop@fs.fed.us

Electronic copies of MTDC's documents are available on the Internet at:

http://www.fs.fed.us/eng/t-d.php

Forest Service and Bureau of Land Management employees can search a more complete collection of MTDC's documents, CDs, DVDs, and videos on their internal computer networks at:

http://fsweb.mtdc.wo.fs.fed.us/search/

T

The Forest Service, United States Department of Agriculture (USDA), has developed this information for the guidance of its employees, its contractors, and its cooperating Federal and State agencies, and is not responsible for the interpretation or use of this information by anyone except its own employees. The use of trade, firm, or corporation names in this document is for the information and convenience of the reader, and does not constitute an endorsement by the Department of any product or service to the exclusion of others that may be suitable.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.